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ON

MISSION TO VIETNAM

TO THE

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CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., January 31, 1984.

Hon. G. V. (SONNY) MONTGOMERY,
Chairman, Veterans' Affairs Committee, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Thank you for authorizing my recent trip to Vietnam to investigate the effects of Agent Orange on the Vietnamese population and terrain. It was a very worthwhile trip and I learned much that will be useful in the work of the Veterans' Affairs Committee. I have enclosed my report from the trip, with my findings and recommendations included.

Already, I have received many inquiries about the trip and many requests for copies of the report. Inasmuch as the trip was on behalf of the Veterans' Affairs Committee, I request that the report be printed.

With kindest regards,
Sincerely,

DON EDWARDS,
Member of Congress.

AGENT ORANGE IN VIETNAM

A report from the Honorable Don Edwards, member, House Veterans' Affairs Committee, to the Committee on Veterans' Affairs, on his visit to Vietnam.

INTRODUCTION

During the period December 30, 1983, to January 5, 1984, I visited Vietnam on the issue of Agent Orange and related issues affecting Vietnam veterans.

Assisting me throughout my visit were Mr. Francis W. Stover, deputy chief counsel, House Veterans' Affairs Committee, and Chief Warrant Officer Joseph M. Hall, U.S. Army liaison for the U.S. House of Representatives. We visited both North and South Vietnam, spending 4 days in Hanoi and 3 days in Ho Chi Minh City (formerly Saigon).

PURPOSE OF MISSION

The primary purpose of the mission was to meet with officials who deal with the health problems of the citizens of Vietnam who served in the Armed Forces of North and South Vietnam during the period 1961–75. In particular, our purpose was to investigate the effects of Agent Orange on the Vietnamese population and terrain.

To this end, we requested the opportunity to meet with physicians, research teams, and any others in Vietnam who work on the effects of Agent Orange on Vietnamese soldiers, on the population in general, and on the environment. In addition, we asked to travel outside Ho Chi Minh City to an area that had been sprayed extensively with Agent Orange.

BACKGROUND

Agent Orange is the code name for the chemicals used extensively by the U.S. military to defoliate jungle areas during the Vietnam war. Many American Vietnam veterans are convinced that their health (and that of their offspring) has been damaged by their exposure to Agent Orange during their tours of duty in Vietnam.

The House Veterans' Affairs Committee became aware of the issue in October 1977, when a Veterans' Administration employee charged that Agent Orange had caused a wide variety of disabilities among Vietnam veterans. Since then many claims for compensation have been filed and investigations on the health implications of Agent Orange exposure have been conducted in the United States by the Veterans' Administration and the scientific community.

From the beginning, the House Committee on Veterans' Affairs, led by its Chair, the Honorable G. V. (Sonny) Montgomery, has had an intense interest in the Agent Orange issue. The Veterans' Affairs Subcommittee on Hospitals and Health Care held many hearings on the subject and hearings were held by the Committee's Subcommittees on Compensation, Pension and Insurance, and Oversight and Investigations.

Currently, the Veterans' Administration is not convinced that a definitive link exists between Agent Orange and the health problems of Vietnam veterans. Nonetheless, it is clear that our veterans who served so bravely in Vietnam do have physical and psychological problems far more severe than veterans of any previous war. In addition, Vietnam veterans have a disturbingly high unemployment rate and they have found it harder than expected to readjust to civilian and family life.

The members of the House Committee on Veterans' Affairs, of both political parties, are unanimous in their determination to help Vietnam veterans. I believe an important part of this help is a resolution of the Agent Orange question: "Is their exposure to Agent Orange a factor in our Vietnam veterans' health problems, such as cancer, liver ailments, neurological disorders, chloracne, loss of sexual potency, psychological problems, and birth defects in offspring?"

I feel strongly that the Agent Orange conundrum must be answered or the Vietnam veteran generation will never find peace.

Since the Agent Orange question first arose, there has been a consistent feeling among many in the U.S. Vietnam veteran population that the Veterans' Administration and the Federal Government do not share their concern. These veterans believe that the White House and the Veterans' Administration are loath to establish Agent Orange as a causal factor for their health problems because of the Federal financial obligations that would result should responsibility be established.

In January 1983, the "International Symposium on Herbicides and Defoliants in War: The Long-Term Effects on Man and Nature" was held in Ho Chi Minh City. This symposium was attended by 160 scientists from 21 countries. The Americans included professionals and scientists from Harvard University; State University of New York, Stoneybrook; Massachusetts General Hospital; California Academy of Sciences; University of Illinois; Yale University; University of Massachusetts; Columbia University; University of Georgia; University of Montana; University of Miami; University of Michigan; Hampshire College, Massachusetts; and University of California, Berkeley.

Among the 72 scientific papers and reports presented at the symposium, 29 reports were on the long-term effects of Agent Orange on humans. The conclusion of the symposium was that exposure to Agent Orange *does* cause health problems in humans. The symposium made the recommendations that further studies be conducted and that they be conducted in a spirit of international cooperation, divorced from politics.

Nonetheless, the Veterans' Administration has discounted the findings and recommendations of the symposium. Indeed, some Vietnam veterans say that the White House and the Veterans' Administration invariably lean towards findings that do not show a connection between Agent Orange and Vietnam veterans' health problems and dismiss any that do.

More than 2 years ago I noted that, while many millions of dollars were being spent on Agent Orange investigations, none of the scientific research was being conducted in Vietnam itself. There is a lack of the

most basic public health and environmental data about Vietnam. Currently, neither the White House nor the Veterans' Administration plan to have studies done in Vietnam. There appears to be no Presidential or Veterans' Administration interest in even glancing at the effects of Agent Orange on the people, the forests, and the total environment of the 2 million acres that, from 1961 to 1972, were sprayed with defoliants and herbicides.

After discussing the matter with many people, including scientists and Vietnam veterans, I concluded that it would be useful for the House Committee on Veterans' Affairs to send a delegation to Vietnam. Such a delegation would explore the possibility that research in Vietnam itself regarding the health impact of Agent Orange on the native population could assist our efforts to assess the health problems of the Americans who served there. It seemed clear to me that such research could provide important information that could not be obtained in any other way.

In early November 1983, Chairman Montgomery authorized me to head such a delegation to Vietnam.

ITINERARY

December 29, 1983.—Arrived Bangkok to meet with United States Embassy officials.

December 30, 1983.—Arrived in Hanoi in late afternoon.

December 31, 1983.—Met with officials of the Public Health and Foreign Affairs Ministries and visited a hospital where we were briefed by physicians and scientists specializing in the epidemiology of birth defects.

January 1, 1984.—Met with scientists at the University of Hanoi who specialized in animal ecology and the environment. Toured the countryside west of Hanoi.

January 2, 1984.—Met with Foreign and Deputy Foreign ministers, and the Minister of Social Welfare on veterans' programs.

January 3, 1984.—Departed Hanoi for Ho Chi Minh Citiy.

January 3–5, 1984.—Toured the defoliated forest area in the Ma Da District, Dong Nai Province, which had been heavily sprayed by Agent Orange and other chemicals. Visited a hospital for women in Ho Chi Minh City. Visited local and city officials in Ho Chi Minh City.

January 5, 1984.—Departed Ho Chi Minh City for Bangkok.

January 6, 1984.—Met with Ambassador Dean and U.S. Embassy staff. Later visited with the Deputy Foreign Minister and the Secretary General of the National Security Council of Thailand.

SCOPE OF REPORT

This report is to provide current information furnished by Vietnamese officials, scientists, and physicians about the effects of Agent Orange on the people and land of Vietnam. It is hoped that this information will be helpful to the members of the Committee and to the Congress as they are called upon to consider legislation on the Agent Orange issue and related matters.

It is *not* intended to serve as a comprehensive statement or analysis of the Agent Orange issue.

A one-week visit to Vietnam by persons with no skills in science or medicine cannot be expected to produce hard evidence regarding the effects of Agent Orange. However, we were able to interview many Vietnamese officials and many doctors at hospitals in both Hanoi and Ho Chi Minh City. We also visited areas outside the cities, including the former inland forest in the Ma Da District of Dong Nai Province (in the former Long Khanh Province, Military Region III, War Zone D), a region heavily sprayed with Agent Orange by U.S. airplanes during the war.

CHRONOLOGY

Saturday, December 31, 1983

Our first interview was with the Vice Minister of the Public Health Ministry, Dr. Hoong Dinh Cau, a physician and surgeon by profession. We were shown a film of the U.S. Ranch Hand Operation from 1962–71, and were provided a review of the "International Symposium on Herbicides and Defoliants in War: the Long-Term Effects on Man and Nature" that was held in January 1983 in Ho Chi Minh City. Dr. Cau was one of the scientists and experts from 21 countries (including the United States) who participated in the symposium. He reviewed in much detail the conclusions of the symposium, whose goal was to report on the long-term effects of herbicides and defoliation on humans and nature. He presented much data and many charts to substantiate some of the conclusions of the symposium which he endorsed. The main conclusion was that adverse health effects *were* caused by Agent Orange exposure. The emphasis of the symposium was almost entirely on the Vietnamese female population and their offspring. It only indirectly included the male soldiers who were in the areas that were sprayed with Agent Orange.

Dr. Cau said there have been sharp increases in Vietnam in spontaneous miscarriages and cancer in females who were exposed to Agent Orange, and in birth defects in their offspring. This information was obtained from pregnant women brought to hospitals for delivery and from studies that have been made on genetics and cancer by Vietnamese scientists. He indicated that studies on the long-term "complications" of Agent Orange exposure will continue.

Dr. Cau also indicated that studying soil core samples of areas sprayed with Agent Orange was very difficult and expensive. He said Vietnam would be willing to participate in such a project with the United States and that "science has no borders".

Our next meeting was with Dr. Ton Duc Lang, a physician-scientist at the Viet Duc Hospital, where he works on the epidemiology of birth defects, and on the consequences (as related to births) from exposure of humans to Agent Orange.

The Viet Duc Hospital has been conducting a comprehensive research program on birth defects in children whose parents were exposed to Agent Orange. Various charts and data showed a higher percentage of birth defects from parents exposed to Agent Orange than from those who were not. For example, one chart showed that over an extended period covering 5,000 births, 2.6 percent of the children were born with birth defects and had parents who *were* exposed to Agent Orange. In comparison, only 0.46 percent of those 5,000

births had birth defects and came from parents who were *not* exposed. Thus, there is a rate of birth defects in offspring five times higher among the sprayed population than among the nonsprayed population. Another chart showed that of 233 pregnancies during a given period, there were 9 with birth defects, all from parents who had been exposed to Agent Orange.

Dr. Lang also reported that they were seeing more liver cancers than previously.

We next visited Dr. Bach Quoc Tuyen, a physician and the Director of the Department of Hematology at the West Duc Hospital. Dr. Tuyen is engaged in the study of chromosome changes caused by toxic effects from chemicals such as Agent Orange and in the study of whether or not such effects cause abnormalities in following generations.

Dr. Tuyen was conversant with the current scientific literature on toxic effects of chemicals, such as the Seveso, Italy and Love Canal, U.S.A. incidents. In all these studies, there has been little attention paid to the structure of the chromosomes of those who were exposed to Agent Orange, and he indicated that more needs to be and should be done in this area.

Dr. Tuyen said that Agent Orange exposure from spraying had led to an increase in still births and to chromosome damage or change which, in turn, led to an increase in birth defects. Dr. Tuyen's studies concentrated on the females who were exposed to Agent Orange spraying. No studies have been made, however, of the chromosomes of the male soldiers.

Dr. Tuyen further indicated that the food chain has been affected by Agent Orange and said there is a possibility that Agent Orange is still doing damage.

Regarding military veterans who were exposed to Agent Orange, Dr. Tuyen said that many were observed to have skin sores (chloracne), insomnia, headaches, respiratory difficulties, and similar conditions because of exposure. In addition to the current U.S. studies, he recommended that the United States conduct a chromosome study on U.S. veterans exposed to Agent Orange.

Although the people we interviewed were always asked about the health problems of Vietnamese soldiers who had been exposed, almost all of the responses were that there have not been many complaints of ill health from their veteran population because of Agent Orange. Some veterans have complained about skin sores, sleeplessness, headaches, and respiratory problems resulting from exposure to Agent Orange. We were told that Vietnamese veterans exposed to Agent Orange in Tay Ninh and Ben Tre Provinces suffer from chronic neurasthenic problems and disproportionate numbers of liver cancers. But there did not seem to be in the Vietnamese veteran population the frequent conviction that Agent Orange had caused them serious physical problems.

I have no substantive explanation for this. I point out, however, that the Vietnamese soldier has no Veterans' Administration to turn to for health care. Also, there appears to be a lack of public discussion in Vietnam regarding Agent Orange. The general public there most likely never heard of Agent Orange; thus they would not link health problems to Agent Orange exposure.

In addition, Vietnam is a very poor country, operating in a state of war for more than 30 years. It is chiefly an agrarian economy, where both men and women work from before dawn until after dusk to scratch out a living. Under these conditions, most physical ailments, unless debilitating, are probably overlooked.

Sunday, January 1, 1984

We visited the University of Hanoi where a biologist, Professor Vo Qui, and his associates briefed us on their studies and their conclusions regarding the consequences of the spraying of Agent Orange on the environment. It was a detailed presentation describing the destruction of both crops and forests by Agent Orange spraying.

He painted a grim picture of destroyed forests—both inland and coastal. With "before" and "after" photographs, he showed the once lush forest areas which today—10 years after the end of the war—remain barren of trees.

Professor Qui stressed that destruction of the forests has caused the soil to deteriorate because of the heavy rains which previously were absorbed by the forest floor. It has caused the extinction of many animals of the forest; has caused a dramatic increase in rodents (since the natural enemies of the rodents are gone); and has led to climatic change since, instead of tropical forest, the sun and wind now dominate the landscape of sparse and sickly grass.

Professor Qui provided charts and graphs which showed an increase of deformities in children, congenital malformations, and spontaneous miscarriages in females who had lived in villages in the forests that were sprayed with Agent Orange, as opposed to those who did not live in such areas.

Professor Qui did not know if the food chain had been affected by Agent Orange spraying. He said he had "not analyzed the consequences" and did "not know if the chemicals remain in the soil or not". He indicated that little has been done in analyzing soil core samples of affected areas, saying it is "very expensive" and because of funding problems, they "can't do it now".

Monday, January 2, 1984

We visited with the two top officials in the Foreign Ministry, Mr. Nguyen Co Thach, the Foreign Minister, and Mr. Ha Van Lau, the Vice Foreign Minister. We were provided a review of the policy of Vietnam with regard to its activities in Kampuchea and Laos, and with regard to Vietnam's relations with Thailand, the ASEAN countries, China, and Russia. Although the United States does not have diplomatic ties with Vietnam, they both indicated that Vietnam hopes to establish ties with the United States. In response to a question, the Foreign Minister indicated he thought it would be a good idea for the United States to establish a Consulate in Vietnam or a U.S. Interests Section in another country's embassy there. It was also stressed by these Vietnamese officials that the United States should form full diplomatic relations with Vietnam.

In response to questions on POW–MIA's, they stated that U.S. and Vietnamese technicians had been meeting in Bangkok four times a year to discuss the situation, but these talks have been postponed because of statements by Secretary of State Shultz in Bangkok, in

August 1983. They reported that Secretary Shultz said that Vietnam is still keeping a number of remains of American soldiers and had branded Vietnam as "brutal and unhumanitarian".

We spent a considerable part of the day with Mr. Kien, the Vice Minister of Social Welfare, who has responsibility for administering veterans' benefits for Vietnam's military participants in the war. Although the Minister was flanked by aides, they seemed unable to provide any precise figures or facts on the size, character, or number of veterans in Vietnam.

Although the Ministry of Social Welfare administers programs in 40 provinces, 400 districts, and 100,000 villages, it has no system for collecting numbers of persons involved in or eligible for its programs. Thus, it was impossible to ascertain any reliable facts on the number of veterans in Vietnam, or how many were disabled or suffering from exposure to Agent Orange. The Minister was unable to provide any facts or figures that would be helpful in determining if their veterans are suffering from any of the illnesses suspected to be caused by such exposure or to link the herbicide with ill effects among their veterans who were exposed.

Nonetheless, Mr. Kien described a rather comprehensive program of veterans' benefits and preferences available to Vietnamese veterans. He stated that all medical care is free, including dental care and eyeglasses, with treatment provided on an outpatient basis or at a hospital. He described rehabilitation centers—eight in all—which provide prosthetic devices, including limbs and wheelchairs. He said the Government also provides homes to which veterans can be admitted if they are unable to work and take care of themselves. For those who have no income or money, the Government provides pensions. In the area of housing, there are homes or apartments for the handicapped, administered by another department. He said there are also educational benefits and veterans' preferences in employment with the Government. If they become citizens, veterans of the Republic of South Vietnam's military are eligible for benefits.

January 3–5, 1984, Ho Chi Minh City

We had a tour of the Ma Da forest area of Dong Nai Province, approximately 50 miles east of Ho Chi Minh City, which had been repeatedly and extensively sprayed with Agent Orange. On our way to and from the affected areas, we visited local officials who run the city of Bien Hua.

The Ma Da forest area was described as having been a rich tropical forest. Before being sprayed with Agent Orange, it had been a three-tiered forest with high trees providing the canopy, and shorter trees the next tier. Under these two tiers was the short-growth vegetation or "jungle" floor where the animals had lived and where people inhabited villages on the roads transversing the forest.

The widespread destruction of forest and jungle is very apparent. Here and there, we observed tree trunks without foliage, obviously dead. In place of the tropical forest, there are sickly grasses and plants. There is no apparent animal life. The Vietnamese Government has constructed a few camps where teams are planting new rubber trees, but the planted trees appear unhealthy and unlikely to survive.

The Vietnamese claim that the soil has lost its fertility and cannot be restored for at least a half century, and then only if expensive restoration programs are instituted. They also state that drainage of the dioxin into the rivers has resulted in widespread destruction of fish and waterplant life.

We next visited the Tu Du Hospital for Women, a hospital specializing in gynecology and maternity cases. This hospital is the largest of its kind in South Vietnam. We were briefed by Dr. Bac Si and her assistants on a birth defect and baby malformation program that has been in process here for many years. We were impressed with the study and the methodology, which seemed more reliable than previous studies presented to us. The data showed a dramatic increase in the rate of birth defects over the extended period of the program. In addition, 64 percent of the women who were at the hospital during the study suffering from cancer of the uterus were from areas sprayed with Agent Orange. The Tu Du program did not include a study of the fathers of the babies in the program.

In our tour of the hospital, we also visited a ward of 16 women in their late teens and early 20's who were suffering from uterine cancer. The emphasis of the work at this hospital was on the toxic chemicals being stored in womens' bodies which cause cancer of the uterus in women and genetic changes affecting offspring.

The Vietnamese are convinced that women, who as girls were living in villages sprayed with Agent Orange, are more likely to have cancer of the uterus and to have offspring with birth defects. Doctors at hospitals in both Hanoi and Ho Chi Minh City expressed this view. They showed us charts and data sheets to support their conclusions. For example, one data sheet indicated that at Tu Du Hospital, in just the past year, there had been nine Siamese births, seven of which were to mothers who had been exposed to Agent Orange. The doctors claimed that birth defects were far above average where the mother or the father had been exposed to Agent Orange.

The chief concerns of the Vietnamese regarding the effects of Agent Orange in their country are not on the health problems of their male military veterans. Their concerns and studies concentrate on the women who were exposed to Agent Orange spraying, the birth defects and deformities of babies whose mothers were exposed, and the damage to nature and natural resources. This probably reflects the fact that Agent Orange exposure was not limited in Vietnam to the male military population; many females, in both the civilian and military populations, were also exposed. In addition, Vietnam is a poor, agrarian country whose population has been decimated by decades of war.

CONCLUSIONS AND RECOMMENDATIONS

Vietnamese scientists and physicians have found exposure to Agent Orange to be a factor in the health problems of the Vietnamese female population and in their offspring. The studies on the female population are not broken down into the female civilian and the female military veteran population. Little or no work has been done specifically on the veteran population, including the male veteran population. There is much yet to be learned regarding the connection between exposure to Agent Orange and subsequent health problems. Thus, I make the following recommendations:

1. *There should be an international, non-political, scientific study conducted in the living laboratory of Vietnam itself.* If we are to provide U.S. Vietnam veterans the answers they need regarding the effects from Agent Orange exposure, I believe it is essential to conduct a study in Vietnam itself. Research must be conducted in Vietnam because it is a living laboratory that will provide a basis to resolve the Agent Orange question here in the United States. In addition, such a study in Vietnam of the long-term effects from the herbicides and defoliants used in the war would assist, in a major way, the studies being conducted in the United States.

The study must be an in-depth analysis of the effects of Agent Orange exposure on U.S. servicewomen and servicemen who served in Vietnam, as well as its effects on the Vietnamese population and environment. It should also include analyses of soil core samples from the affected areas; the effects on the food chain; and, the effects on the offspring of those exposed.

There is no doubt as to the seriousness of purpose of the Vietnamese scientists and doctors who have been studying the effects of Agent Orange on its people and environment. Nevertheless, the Vietnamese scientific community seems to lack the equipment and the resources to adequately study the question of damage to health and environment from Agent Orange.

It is essential that the research in Vietnam be conducted by an objective, non-political, international team of scientists. Because of the past war, scientists from the United States or from Vietnam would have little credibility in conducting the studies; therefore, representatives of our nations should participate in the study as observers. In addition, the Veterans' Administration should be on the front line, in touch with the latest happenings, and receptive to the research of others.

Certain international agencies might be suitable to conduct such a study—the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Program (UNDP), the United Nations Environmental Program (UNEP), the World Health Organization (WHO), the World Lifetime Fund (WLF).

The important thing is to get the study started in Vietnam while the living laboratory is there, awaiting the essential investigation, and before it is too late to help the men and women alive today who were hurt by their exposure to Agent Orange.

2. *The United States should smooth the way for the requisite study in Vietnam which, I believe, will provide the basis for the resolution to the fundamental question: "What are the effects of Agent Orange exposure on the health of the veterans who served in that country from 1961–73?"*

3. *There is a need right now to take care of our Vietnam veterans with health problems.* We must provide compensation and health care now to these afflicted individuals. They cannot wait for results from the recommended study in Vietnam or from studies in this country, all of which, properly done, will take years to complete.

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